

**Abstract of the Invention****METHOD FOR INCREASING LIGHT OLEFIN  
YIELD BY CONVERSION OF A HEAVY  
HYDROCARBON FRACTION OF A PRODUCT TO LIGHT OLEFINS**

5  
10  
15

A method for increasing light olefin yield during conversion of oxygenates to olefins comprising: contacting an oxygenate feed in a primary reactor with a non-zeolitic molecular sieve catalyst under conditions effective to produce a first product comprising light olefins; separating the first product into light olefins and a heavy hydrocarbon fraction; feeding the heavy hydrocarbon fraction either back into the primary reactor or to a separate auxiliary reactor; and, subjecting the heavy hydrocarbon fraction to conditions effective to convert at least a portion of the heavy hydrocarbons to light olefins.